

Patent mtg
July 14

DISCLOSURES UNDER CONSIDERATION

Philip Morris Incorporated
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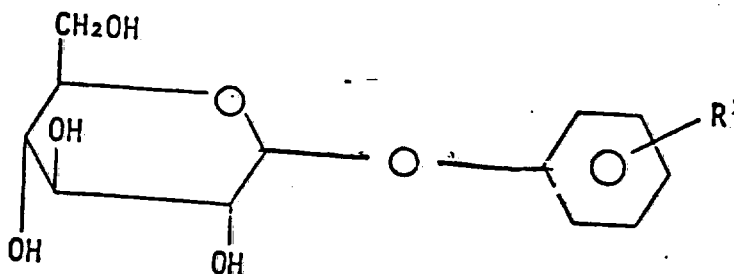
23 June 1980

Code 1 - Offensive/Urgent
Code 2 - Defensive/Urgent
Code 3 - Offensive/Normal
Code 4 - Defensive/Normal

787 USE OF PHENOLIC GLYCOSIDES AS FLAVORANTS IN TOBACCO

E. Sanders/R&D/Chemical Research/Osdene

Compounds having the formula:



are added to tobacco in the range of about 0.02 - 0.5%. On smoking, said compounds pyrolyze between about 250 - 350°C to release the desired phenol as the only volatile product. The phenolic glycoside tobacco flavorants disclosed herein are particularly advantageous in that they are odorless and can be used in any desirable amount without adversely affecting pack aroma.

D&O/Hutcheson

CODE 4

7-21-77 Disclosure received.
9-19-78 Disclosure to D&O for evaluation.
10-78 Search received from D&O.
3-79 Further development work being done by inventor.
9-79 Synthetic routes are being developed according to the inventor.
1-25-80 Inventor believes sufficient information is available to prepare application.
3-11-80 Search results sent to inventor for review.
3-14-80 Inventor will redraft disclosure and resubmit to Depaoli for application preparation.
6-8-80 Inventor indicated that he hoped to have something ready shortly.

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0000049401

795 MICROWAVE/GAS CHROMATOGRAPHY

D. Watson/R&D/Analytical Research/Bourlas/Lowitz/Farone

Microwave energy source selectively vaporized components for further separation by GC.

Related to 794

Blish

CODE 4

10-24-77 Disclosure received.

2-78 Search sent to inventor for review.

12-78 Inventor has asked that this case not be prosecuted pending his further investigations of the method, possibly should be inactivated.

INACTIVE 3-79 Inventor preparing new disclosure.

6-30-80 Inactive due to further information.

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796 BIOSYNTHESIS OF A TOBACCO FLAVORANT OR TOBACCO SMOOTHER--
FERMENTED TOBACCO

B. Semp, D. Teng, and S. Tenhet/R&D/Biomaterials/O'Donohue/Lowitz/Farone

Organisms obtained from fermented tobacco are transferred into sterile tobacco extracts and by employing various fermentation techniques, flavorants similar to those present in fermented tobacco are produced. These flavorants may then be applied to various tobacco materials to enhance or enrich their subjective organoleptic characteristics.

Hutcheson

CODE 2

10-28-77 Disclosure received.

8-78 Preliminary search completed on PM data base.

3-79 Experimental work underway.

9-6-79 Additional art found on "accelerated fermentation" and forwarded to inventors. Similar concepts disclosed in US 516778 and 1262622.

9-10-79 Memo to inventors reviewing prior art.

9-79 Search requested from outside firm.

10-15-79 Search received; results under evaluation; report to be written.

6-24-80 Sent memo to inventors requesting a review of memo dated 10 September 1979. Awaiting response regarding search results.

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0000049402

816 COPOLYMER POSSESSING WATER AND/OR ETHANOL SOLUBILITY FOR
MAKING SMOKING COMPOSITIONS

W. Johnson, Jr. and H. Grubbs/R&D/Chemical Research/Sanders/Osdene

Monomers of flavor-release polymers are mixed with monomers containing polar groups and copolymerized to give a copolymer which possesses water and/or ethanol solubility. Typically the copolymerizations are carried out in bulk using free radical catalysts. Smoking compositions are treated with the polymers by spraying or by incorporating in reconstituted tobacco.

Hutcheson

CODE 2

3-2-78 Disclosure received.
8-78 Discussed with inventors.
3-79 Awaiting completion of example work and smoking data.
8-79 Inventors indicate experimental work is proceeding and subjective evaluation should be completed by the end of the year.
1-24-80 Experimental work completed.
3-11-80 Requested guidance from Dr. Sanders in obtaining necessary information to prepare application.
4-15-80 Inventor Grubbs will organize available data so that we can proceed.

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0000049403

836 BONDING OF POLYPROPYLENE WRAP TO ITSELF BY LASER IRRADIATION

W. Farone, A. Lilly, Jr., P. Martin, and W. Claflin/R&D/Applied Research/Physical Research/Kassman/Lowitz/New Products/Meyer

Techniques for bonding two sheets together at high speed using focussed (2 focal length) CO₂ laser beam. Bonded area around 0.008 diameter. with reflecting foil beneath the wraps speed for bonding was 590 feet/minute with 40-60 watts power.

Sarofeen

CODE 1

5-23-78 Disclosure received.
7-12-78 Search requested from outside firm.
7-28-78 Search received--sent to Farone for evaluation.
Final disclosure details expected following testing.
11-1-78 Meeting with Farone et al--special laser has to be ordered.
8-79 Testing now in progress.
11-19-79 Laser has been received and testing is active.
1-24-80 Memo to Farone indicating that work is progressive.
6-27-80 Work is still proceeding--waiting for further details.

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0000043404

840 METHOD FOR REDUCING CO DELIVERY IN NONFILTERED CIGARETTES

R. Ikeda/R&D/New Products/Meyer

A cigarette is made with a wrapper selected to pass through it gases of specific molecular size. Ducts are provided for passing a maximum of the smoke volume contiguously to the wrapper to maximize transfer of the said gases through the paper. Small gas molecules exit into the ambient air and out of the smoke stream prior to entering the smoker's mouth.

Sarofeen

CODE 4

6-23-78 Disclosure received.

Awaiting tests by inventor to develop method.

Close art.

New disclosure to be submitted by Ikeda and Houck.

8-30-79 Talked with Houck--project still alive but the way to go with the construction is still being determined.

4-14-80 Waiting for further details.

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844 PROCESS FOR CHEMICALLY PULPING TOBACCO MATERIALS FOR SHEET MAKING

A. Keller and G. Bokelman/R&D/Tobacco Materials/Burns/Gannon

Burley stems are extracted with water, then subjected to a short period of reflux in about 25% aqueous potassium hydroxide solution. The stems are next washed and subsequently treated with steam at about 115 psi and 167 degrees C for a few minutes. The stems may then be adequately defibrillated merely by gentle stirring; i.e., without any mechanical refining. Long, thin fibers, which cannot be made by mechanical refining are produced by this invention.

Hutcheson

INACTIVE

8-1-78 Disclosure received.

8-11-78 Preliminary search results sent to inventors.

3-79 Comparative studies underway.

11-19-79 Results in Annual Report are being assessed to determine whether to proceed with application.

1-25-80 Inactivated due to close prior art.

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0000049405

849 POLYMERS FOR IMPROVING FLAVOR AND AROMA OF SMOKE

H. Grubbs, T. Van Auken, and W. Johnson, Jr./R&D/Chemical Research/
Sanders/Osdene/Physical Research/Kassman/Lowitz/Farone

Polymers of unsaturated aliphatic, aromatic carbonates can be prepared in ways similar to the preparations of unsaturated aliphatic, aliphatic carbonates as disclosed in 687. These polymers, when added to cigarette filler, on smoking liberate phenolics to the smoke stream, which improve the flavor and aroma of the smoke.

Spin-off of 687.

Hutcheson

CODE 3

9-29-78 Disclosure received.

11-6-78 Examples being prepared; synthetic process under development.

9-4-79 Subjective smoking results to be generated to complete project.

1-24-80 Subjective smoking results not yet available.

3-12-80 Memo to Sanders requesting guidance in dealing with this disclosure.

3-18-80 Memo to inventors requesting examples and smoking data.

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850 POLYMERS OF NICOTINE AND NICOTINE ANALOGUES

W. Johnson, Jr./R&D/Chemical Research/Sanders/Osdene

Polymers of nicotine analogues and of nicotine itself, which possess carbonate or ester linkages, are to be prepared from suitable substituted nictines via condensation reactions. The polymers would consist of nicotine moieties, moieties of substituted nictines joined by ester linkages or of nictinic esters that have been condensed with appropriate diols, which may or may not be nictinic in character but which in combustion and/or pyrolysis will yield nicotine and products that do not adversely affect cigarette smoke.

Hutcheson

CODE 4

9-29-78 Disclosure received.

11-6-78 Search completed--to inventor for review.

Awaiting more definitive information and examples.

9-4-79 Project in preliminary stage.

1-25-80 No experimental data available.

3-12-80 Memo to Sanders requesting assistance in dealing with this disclosure.

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0000049406

851 SOLANESOL ANALOGUES AND ESTERS THEREOF FOR APPLICATION TO CIGARETTE FILLER

W. Johnson, Jr., H. Grubbs, and G. Chan/R&D/Chemical Research /Sanders/Osdene

Solanesol analogues and esters thereof are to be applied to cigarette filler and smoked. Improved subjective reponse should result. The efficacy should optimize in those cigarettes whose tar deliveries are low, i.e., below 9-10 mg when smoked by standard machine methods.

Hutcheson

CODE 4

9-29-78 Disclosure received.

3-79 Methods for preparing compounds being developed.

9-4-79 Project in preliminary stage.

1-25-80 Experimentation to make compounds still underway.

3-12-80 Memo to Sanders regarding this disclosure--will meet with inventors to discuss.

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856 ELECTRON BOMBARDMENT FOR CONTROLLING BEETLE INFESTATION

R. de la Burde/R&D/Tobacco Materials/Burns/Gannon

Related to earlier Laszlo case.

Palmer

CODE 4

10-18-78 Disclosure received.

10-20-78 Awaiting further data.

1-14-80 No further results to be expected--Burde.

2-8-80 Memo from Gannon re status; 2-12-80 Palmer reply.

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0000049407

860 NOVEL FILTER FOR DELIVERY OF MAXIMUM FLAVOR

D. Keel and W. Bell/R&D/Flavor Development/Daylor/Meyer

Filter that contains a tube(s), or components that fit together to form a tube(s), in a matrix of filter tow or a solid (or foam) rod by which a portion of raw, unfiltered smoke can be delivered to the mouth of the smoker with a volume of air dilutin provided by means of perforation or porosity of the tipping paper with or without flutes, bumps, or other known means.

Inskeep

CODE 2

12-1-78 Disclosure received.
5-7-79 Have only subjective data, expect analytical results soon.
12-6-79 Information received from Keel, more expected.
2-29-80 Panel results etc. maybe in 2 weeks; possibly more later.
3-21-80 Note to inventors about results.
5-22-80 Some data received.
6-10-80 Interview with D.K. Different embodiment now being pursued. Search set up.

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0000049408

8 865 REDUCED DELIVERY SMOKING PRODUCT

B. Semp and D. Teng/R&D/Biomaterials/O'Donohue/Lowitz/Farone

Microbial treatment of a tobacco extract followed by recombination with the fibrous portion of the tobacco produces a cigarette material that yields less HCN and CO. Additionally the TPM of the treated versus untreated also show reductions.

Related to 810 and 838.

Hutcheson

CODE 1

12-21-78 Disclosure received.

6-29-79 Disclosure sent to WLKT for evaluation in view of prior filings of 810 and 838.

7-17-79 Letter to WLKT re how to proceed.

9-79 Search requested from outside firm.

9-5-79 Development work in the pilot plant may result in additional filings in this area--no definitive data at this time.

10-15-79 Search received.

11-6-79 Discussed in depth with inventors and T. Gillis; determined that additional experimental data is necessary to define optimum limits of operation for achieving best gas phase reduction.

4-3-80 Note to files recommending moving this disclosure forward as soon as possible; Lowitz/Farone concur.

5-8-80 Inventor Semp hopes to have report completed shortly.

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875 RECONSTITUTED TOBACCO SHEET

R. Uhl and G. Gellatly/R&D/Tobacco Materials/Burns/Gannon

A process for producing a reconstituted tobacco sheet by wet forming on a paper making device except that a high bulk sheet is obtained by eliminating sheet compression due to mechanical pressing to remove water and by eliminating sheet ironing due to drying on a heated cylinder.

Inskeep

CODE 2

2-14-79 Disclosure received.

8-9-79 Identical disclosure 889 combined herewith.

11-27-79 Progress report being written.

2-29-80 Progress report written--waiting approval.

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0000049409

879 PRODUCTION AND USE OF REACTION FLAVORS FROM YEAST HYDROLYSATE AND SUGARS

B. Semp, L. Wu, and J. Swain/R&D/Flavor Development/Daylor/Meyer/Bio-materials/O'Donohue/Lowitz/Farone

Reaction flavors for smoking products are disclosed. The flavors are prepared by reacting reducing sugars and selected hydrolysates of single-cell protein optionally in the presence of an aldehyde in an essentially solvent-free system. The thus prepared flavors may be incorporated into smoking compositions including tobacco, reconstituted tobacco, non-tobacco substitutes or mixtures thereof.

Hutcheson

CODE 2

3-20-79 Disclosure received.

4-80 Spoke with inventor Wu, and she will submit the necessary experimental data.

5-8-80 Additional information and subjectives submitted and discussed with inventor Wu.

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880 USE OF B-DIKETONES TO FORM DIHYDROPYRIDINES AND PYRIDINES

F. DeBardeleben/R&D/Chemical Research/Sanders/Osdene

Pyridines and dihydropyridines are synthesized from β -diketones. For example, reaction of acetylacetone with ethyl β -amino crotonate would generate 2,4,6-triethyl nicotinic acid and 2,4,6-trimethyl nicotines.

Hutcheson

CODE 4

3-23-79 Disclosure received.

9-20-79 Search by TPI requested. TPI awaiting input from Dr. DeBardeleben before search is conducted.

3-17-80 Memo to inventor asking him to supply information to TPI for search.

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0000049410

882 USE OF TRANS 2-PENTENAL TO GENERATE THE PYRIDINE RING

F. DeBardeleben/R&D/Chemical Research/Sanders/Osdene

Synthetic routes for preparing nicotine analogues are disclosed wherein the pyridine ring is generated by reacting trans 2-pentenal with, for example, 3-amino crotonate. Various 2,4-dialkyl-nicotines may be prepared.

Hutcheson

CODE 4

3-23-79 Disclosure received.

9-20-79 Search by TPI requested. TPI awaiting input from Dr. DeBardeleben before search is conducted.

3-17-80 Memo to inventor asking him to supply information to TPI for search.

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888 DEVICE FOR THE MODIFICATION OF THE RATE OF DELIVERY OF TOBACCO SMOKE COMPONENTS

G. Forrest and G. Vilcins/R&D/Analytical Research/Bourlas/Lowitz/Farone

Device for the modification of the rate of delivery of tobacco smoke components based on the transient retention of the component by the device. Retention must be on the order of the time between puffs.

Blish

CODE 3

4-24-79 Disclosure received.

11-79 Assigned to Blish.

4-2-80 Inventors interviewed.

5-12-80 Results of prior art search sent to inventors

6-17-80 Inactivated

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INACTIVE

0000049411

894 USE OF PIPERAZINES AS FLAVORANTS AND/OR COOLING COMPOUNDS

W. Edwards and Y. Houminer/R&D/Chemical Research/Sanders/Osdene

Tobacco flavorant and/or cooling compounds selected from 1,4-disubstituted pyrazines and alkylpiperazines wherein the 1,4-substituents are acyl, sulfonyl and carbamido are disclosed.

Hutcheson

CODE 4

5-7-79 Disclosure received.

11-20-79 Experimental and synthesis work completed; analytical smoking data will be obtained in the near future.

3-14-80 Sanders indicated that the work was near completion. A draft should be ready shortly.

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895 1,2- AND 1,4-DIHYDROPYRAZINES (I, II) AS FLAVORANTS AND/OR COOLING COMPOUNDS

W. Edwards and Y. Houminer/R&D/Chemical Research/Sanders/Osdene

Tobacco flavorant and/or cooling compounds selected from 1-substituted-1,2-dihydropyrazines and 1,4-disubstituted dihydropyrazines wherein the 1- and 4-substituents are acyl, sulfonyl and carbamido.

Hutcheson

CODE 4

5-7-79 Disclosure received.

11-20-79 No experimental or synthesis data available at this time.

3-80 No data available for draft purposes at this time.

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896 FLAVOR-RELEASE AGENTS ON TOBACCO

W. Johnson, Jr. and H. Grubbs/R&D/Chemical Research/Sanders/Osdene

Polymeric sulfur release flavorant compounds are disclosed as being useful in smoking products. Processes for their preparation and use on tobacco are detailed.

Hutcheson

CODE 4

5-8-79 Disclosure received.

9-5-79 Preliminary synthesis work underway.

1-24-80 Synthetic work completed; subjectives to be done in near future.

3-14-80 Data to be submitted by inventors as soon as possible.

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0000049412

897 SYNTHESIZING PYROLYTIC PRECURSORS TO PRODUCE ALDEHYDIC-TYPE FLAVORANTS

M. Bourlas and H. Grubbs/R&D/Chemical Research/Sanders/Osdene/Analytical Research/Bourlas/Lowitz/Farone

Polymeric flavorants release compounds having controlled thermal decomposition properties producing aldehydic-type flavorants on combustion are disclosed. Prior to smoking, the compounds are non-volatile and non-migratory.

Hutcheson

CODE 2

5-7-79 Disclosure received--lacks detail.

9-4-79 Preliminary synthesis of monomers underway.

1-25-80 Examples prepared for subjective evaluation.

3-80 Inventors hope to complete this project by the end of August.

6-30-80 Project being actively pursued by inventor Grubbs and assistant. Should be completed by end of summer.

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898 COMPOUNDS CONTAINING THE BASIC ELEMENTS OF THE NICOTINE MOLECULE

W. Edwards and J. DeBardeleben/R&D/Chemical Research/Sanders/Osdene

Nicotine analog with fixed geometry through attachment of the N-methyl to the 2-position of the pyridine ring. Alkylated or arylated equivalents.

Inskeep

CODE 4

INACTIVE

5-10-79 Disclosure received.

9-79 Progress will be reported by inventors.

3-25-80 Alternative of publishing being investigated.

6-27-80 Made inactive pending further work, per E. Sanders

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899 METHYL-PYRIDO-AZABICYCLO-OCTANE AND ALKYL-SUBSTITUTED ANALOGUES

J. Seeman and C. Chavdarian/R&D/Chemical Research/Sanders/Osdene

Nicotine analog with fixed geometry through methylene bridging from 5' to 2. Alkylated homologs.

Related to 893.

INACTIVE

Inskeep

CODE 4

5-15-79 Disclosure received

11-20-79 Awaiting hopefully more promising test results.

3-26-80 Note to inventors seeking more information.

4-15-80 May be several months before HPLC results; inactivated.

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902 MEASURING PRESSURE DROP

D. Brookman/Manufacturing Engineering/Kay/Pasquine

A strip of cigarette tipping paper after being perforated is guided over a pressurized port of prescribed area. A positive air pressure is maintained at said port to be available to bleed through the holes in the tipping paper. The pressure drop is measured across the paper to determine the degree of porosity attained.

Related to earlier Stultz case.

Sarofeen

CODE 2

5-17-79 Disclosure received.

9-19-79 This case is similar to Ed Stultz' case, now pending, which differs only in the use of positive air pressure as against Stultz' use of negative air pressure. This case is being held in abeyance pending first Office Action on the Stultz case.

4-17-80 Take up with John Torrente for preparation.

INACTIVE 5-6-80 Inactive pending decision by WLKT

6-27-80 Inactive

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905 REORDERING OF DIET

C. Hoelzel/R&D/Physical Research/Kassman/Lowitz/Farone

A method of reordering expanded tobacco wherein fully reordered tobacco is mixed with freshly expanded tobacco prior to entering the reordering cylinder. From the reordering cylinder the mixture is sent to a bulking silo (first in-first out type) from which a portion is removed at the exit for use in the "fully reordered" tobacco mentioned above.

Inskeep

CODE 1

3-21-79 Disclosure received.

6-79 Preliminary search completed--sent to inventor for review.

6-22-79 Inventor's comments received.

7-2-79 Discussed with Farone--awaiting test results.

1-23-80 Considering disposition: Hoelzel.

4-15-80 Note to Kassman suggesting need for action. No prospect of pilot plant test to verify this invention.

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0000049414

909 QUALITY CONTROL METHOD

R. Creamer/Chemical Research/Kassman/Lowitz/Farone

Light absorption, rather than more usual scattering, is applied to smoke aerosol to study variations within a puff or from puff to puff.

Blish

CODE 4

7-22-79 Disclosure received.

7-23-79 Sent to Osdene/Johnson for recommendations/comments.

11-27-79 Sent to Sanders for comment; in-house search completed.

1-4-80 Sent to Kassman for comment.

4-24-80 In-house search completed; inventor notified-results sent to inventor for comments.

5-16-80 Inventor comments received

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910 COOLING VACUUM PUMPS BY AIR FLOW

E. Grollmund/Manufacturing Engineering/Kay/Pasquine

A system for maintaining laser vacuum pump temperature levels within safe operating limits to allow for elimination of down time due to pump overheating. Also increases pump life and contributes to more even power output from laser.

INACTIVE Sarofeen

8-6-79 Disclosure received.

11-19-79 This disclosure was made for record purposes in view of disclosure to the supplier of the laser unit.

3-6-80 Inactivated.

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0000049415

915-- MEANS FOR REDUCING SPHERICAL ABERRATION IN A LENS

D. Lowitz/R&D/Applied Research/Farone

This is directed to facilitate micro images with a CO2 laser perforator which produces an invisible beam, or to generally focus invisible beam laser. When using a lens to focus a laser beam, a second or additional element may be provided that is essentially a lens element in its basic construction, but which does not have any center portion. Because lens elements of a finite size and thickness normally introduce spherical aberration, such an additional element that does not have a center region of material can be used together with the primary lens element to modify the effective focal length of the outer portion of the primary lens and to make it equal to the center portion of the primary lens, and thereby eliminate spherical aberration and permit focusing to a spot.

Sarofeen

CODE 2

8-27-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Sarofeen.

11-20-79 Inventor is preparing technical data.

1-24-80 No further material received to date.

4-14-80 Inventor considering advanced design.

6-27-80 Inventor considering advanced design.

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916 CIGARETTE FILTER

J. Lephardt/R&D/Analytical Research/Bourlas/Lowitz/Farone

A ventilated filter with tow compressed toward axis at the zone of ventilation to disperse smoke better across the filter.

Inskeep

INACTIVE CODE 1

8-28-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Inskeep.

9-20-79 PM data base search completed.

1-24-80 No work contemplated.

2-11-80 Inactivated per Bourlas.

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0000049416

917 CIGARETTE FILTER

J. Lephardt/R&D/Analytical Research/Bourlas/Lowitz/Farone

A ventilated plug-space-plug filter wherein the space contains a conical baffle and is positioned at the ventilation zone. Air-smoke mixing is favored.

INACTIVE Inskeep
CODE 1 have an outer portion.
8-28-79 Disclosure received--inventor notified.
9-5-79 Disclosure assigned to Inskeep.
9-20-79 PM data base search completed.
1-24-80 No work contemplated.
2-11-80 Inactivated per Bourlas.

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918 INERTIAL FRICTION DRIVE CONVEYOR CHAIN SYSTEM

M. Slovic/Stemmery

A system for conveying palleted or flat sided materials such as load containing boxes. The basic component is a roller or slide chain comprising a top mounted roller in an upwardly projecting lug. The chain is driven preferably in a channel guide. The load bearing upwardly projective lugs receive the load on a lug mounted roller. the weight of the load pressing against the upper rollers causes it to move with the chain supported on the rollers. An impediment to the movement of the load such as a stop at the end of desired travel causes the chain to underide the stopped portion of the load while continuing to advance other portions of load along the chain lengths.

Sarofeen
8-29-79 Disclosure received--inventor notified.
9-5-79 Disclosure assigned to Sarofeen.
9-12-79 Search requested from outside firm.
10-8-79 Search received--sent to inventor for review.
11-20-79 Search results show very close art.
1-24-80 Due to be inactivated.
4-14-80 Inventor is considering possible points of novelty.

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0000049417

922 HIGH STRENGTH RECONSTITUTED TOBACCO SHEET WITHOUT NON-TOBACCO ADDITIVES

G. Gellatly, J. Baggett, G. Wilkinson, G. Jenkins/R&D/Tobacco Materials/Burns/Gannon

Simple sheet making process to minimize processing steps and capital expenditure. Tobacco materials are pressurized with steam for about 1 hour and the pressure released rapidly. This disintegrates the structure of the tobacco to a paste. This paste can then be cast into a sheet or formed by paper making techniques into a sheet of superior strength to other known processes.

Inskeep

10-79 Disclosure received - inventor notified.

11-79 Assigned to Inskeep.

3-31-80 Work by inventors is progressing.

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925 NWA IMPROVEMENTS

W. Nichols/R&D/Cigarette Development/Gauvin/Meyer

Sarofeen

9-14-79 Disclosure logged in - inventor notified.

1-24-80 One case (PM 914, Gergely) based on these improvements has been filed.

4-14-80 Awaiting further disclosures and developments.

6-27-80 Awaiting further disclosures and developments.

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926 CHEMICAL STRUCTURES WHICH FACILITATE TRANSPORT OF MATERIALS ACROSS BILAYERS

J. Lephardt/R&D/Analytical Research/Bourlas/Lowitz/Farone

Inskeep

CODE 4

9-26-79 Disclosure received - inventor notified.

10-31-79 Assigned to Inskeep.

1-10-80 Search requested from outside firm.

2-21-80 Search received—to inventor for review.

3-31-80 Inventor sees no direct anticipation; will aim for an example.

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0000049418

927 FILTER

H. Maxwell/R&D/Flavor Development/Daylor/Meyer

Filters were made using triethyl citrate (TEC) as plasticizer. TEC was applied at 2.5, 5.0, 7.5, and 10% of filter tow weight. Control filters were made with 10% triacetin plasticizer. The filters were attached to mentholated cigarette rods and subjected to aging study.

Inskeep

10-16-79 Disclosure received - inventor notified.

11-79 Assigned to Inskeep.

4-15-80 Inventor will supply data shortly. Searching here.

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928 PREPARATION OF N-TERT BUTYL-p-MENTHANE-3-CARBOXAMIDE (WS-14)

R. Comes and S. Haut/R&D/Chemical Research/Bourlas/Sanders/Osdene

A one step synthesis from menthyl chloride leading to a pure WS-14 in a shorter period of time with a comparable yield.

Hutcheson

10-22-79 Disclosure received - inventor notified.

10-31-79 Assigned to Hutcheson.

11-9-79 Search conducted by TIF in 1978 sent to inventors for evaluation.

1-25-80 Awaiting information from possible inventor Van Auken.

3-17-80 Memo to inventors asking for any new data; 4-80 inventors indicated that data will be ready soon.

6-30-80 Inventors continue to persue this area of work; no new data available at this time.

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932 RESOLUTION OF RACEMIC MENTHOL

S. Haut/R&D/Chemical Research/Sanders/Osdene

Inskeep

10-31-79 Disclosure received - inventor notified.

1-21-80 Assigned to Inskeep.

3-31-80 Sanders indicates low priority.

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0000049419

933 SPIRAL-WOUND PACKED BED REACTOR

H. Bravo/R&D/Biomaterials/O'Donohue/Lowitz/Farone

The invention involved a spiral-wound packed bed reactor consisting of a tube containing a flexible foam which may be smooth or contain indentions. On this foam are adhered segmented packets of encapsulated microorganisms which perform specific bio-chemical reactions. The encapsulated cells are segmented to facilitate and control flow rates and prevent compaction.

Hutcheson

CODE 1

11-2-79 Disclosure received - inventor notified.
12-79 Assigned to Hutcheson.
1-8-80 Discussed with inventor and manager. Must investigate prior art before processing.
2-11-80 Inventor to organize data for disclosure.
3-19-80 Met with T. Gillis of WLKT to discuss disclosure and state of the art.

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934 TOBACCO BEETLE CONTROL

H. Bravo/R&D/Biomaterials/O'Donohue/Lowitz/Farone

The invention is a process to kill the symbiotic yeast in tobacco beetles and indirectly kill the larvae and eggs that the adult beetle might deposit. In this method the tobacco can be sprayed with phosphoric acid to lower the pH. Alternatively, the container in which the tobacco will be stored for maturation can be dipped in phosphoric acid or it could be sprayed with the strong acid before the tobacco is pressed into it. As tobacco or container dries, the pH is further lowered making it impossible for the symbiotic yeast to survive.

Inskeep

CODE 4

11-5-79 Disclosure received - inventor notified.
12-79 Assigned to Inskeep.
3-3-80 Searched here: tobacco + leaf + phosphoric acid.
4-18-80 Further studies complete in about a month.

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0000049420

935 MATERIALS AND METHOD FOR THE MANUFACTURE OF PELLETS (PI)

H. Bravo/R&D/Biomaterials/O'Donohue/Lowitz/Farone

The invention is a method for producing pellets containing live microbial cells or active enzymes. To make the pellets, the cell or enzyme solution is reacted with celite 545 (filter aid), glutaraldehyde, and polyethyleneimine, which are added sequentially. The end product consists of highly permeable pellets in which the protein on the outer wall of the microorganism or on the enzyme has reacted with the polymeric ingredients added.

Related to 936 and 937.

Hutcheson

CODE 2

- 11-5-79 Disclosure received - inventor notified.
- 12-79 Assigned to Hutcheson.
- 1-8-80 Discussed with inventor and manager. Must investigate prior art before processing.
- 3-5-80 State of the art search requested of TPI and Gillis; review papers sent to inventor for review.
- 3-19-80 Meeting with T. Gillis of WLKT to discuss invention and state of the art.
- 3-21-80 Questions on process to inventor.
- 3-80 Search efforts continue; TPI preliminary search completed.
- 6-30-80 Papers received. Will attempt to organize and prepare research report in July.

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0000049421

936 MATERIALS AND METHOD FOR THE MANUFACTURE OF PELLETS (PI)

H. Bravo/R&D/Biomaterials/O'Donohue/Lowitz/Farone

The invention is a method for producing pellets containing live microbial cells or active enzymes. To make the pellets, the cell or enzyme solution is reacted with celite 545 (filter aid), POLY(acrylamide acrylic acid) saturated in ethanol, and polyethylene imine, which are added sequentially. The end product consists of highly permeable pellets in which the protein on the outer wall of the microorganism or on the enzyme has reacted with the polymeric ingredients added.

Related to 935 and 937.

Hutcheson

CODE 2

- 11-5-79 Disclosure received - inventor notified.
- 12-79 Assigned to Hutcheson.
- 1-8-80 Discussed with inventor and manager. Must investigate prior art before processing.
- 3-5-80 State of the art search requested of TPI and Gillis; review papers sent to inventor for review.
- 3-19-80 Meeting with T. Gillis of WLKT to discuss invention and state of the art.
- 3-21-80 Questions on process to inventor.
- 3-80 Search efforts continue; TPI preliminary search completed.
- 6-30-80 Paper received. Will attempt to organize and prepare search report in July.

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0000049422

937 SAPONIFIED UNSATURATED FATTY ACIDS

H. Bravo/R&D/Biomaterials/O'Donohue/Lowitz/Farone

The invention is a method for producing pellets containing live microbial cells or active enzymes. To make the pellets the cell or enzyme solution is reacted with celite 545 (filter aid); saponified unsaturated fatty acids i.e. sodium oleate, linoleic acid, linoleic acid, Joy liquid soap, White Dove liquid soap, etc. and polyethyleneimine, which are added sequentially. The end product consists of highly permeable pellets in which the protein on the outer wall of the microorganism or on the enzyme has reacted with the polymeric ingredients added.

Related to 935 and 936.

Hutcheson

CODE 2

- 11-5-79 Disclosure received - inventor notified.
- 12-79 Assigned to Hutcheson.
- 1-8-80 Discussed with inventor and manager. Must investigate prior art before processing.
- 3-5-80 State of the art search requested of TPI and Gillis; review papers sent to inventor for review.
- 3-19-80 Meeting with T. Gillis of WLKT to discuss invention and state of the art.
- 3-21-80 Questions on process to inventor.
- 3-80 Preliminary search completed by TPI; papers ordered.
- 6-30-80 Papers recd. Will attempt to organize & prepare search report during July.

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0000049423

938 PROTEIN PRECIPITATION ON SEL

H. Bravo/R&D/Biomaterials/O'Donohue/Lowitz/Farone

A process to remove some of the protienaceous components of SEL (tobacco juice). In this method the pH is raised from 5.5 to 8 to insolubilize protein precipitation at its isoelectric pH (least soluble pH of protein). Using 2N KOH to raise the pH, the insoluble solids were increased from 7.73 grams up to 22.78 grams. when in addition to the pH adjustment 10.7 grams K_2HPO_4 /liter of SEL was added, the insoluble solids were increased from 7.73 grams up to 32.83 grams. The solids were separated by centrifugation and decanting of the supernatant. The process may consist only on adjusting the pH to alkalinity or it could involve pH adjustment plus addition of K_2HPO_4 .

Hutcheson Combined with 939

CODE 2

11-5-79 Disclosure received - inventor notified.

12-79 Assigned to Hutcheson.

6-9-80 Search completed and sent to inventor. Rec. combining 938 since process is particularly useful in conjunction with Fed-Batch Denitrification.

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939 DENITRIFICATION OF SEL BY FEDBATCH FERMENTATION

H. Bravo/R&D/Biomaterials/O'Donohue/Lowitz/Farone

A process for denitrification of SEL using the fedbatch fermentation process. In this process the cell innoculum and some of the nutrients are introduced first into the fermentor in proportions slightly in excess to that needed to denitrify a full vessel of SEL. The tobacco juice (SEL which has been adjusted to pH 7.3 and autoclaved) is then continuously added at a sufficient rate to fill the fermentor in 12 hours. This process will resemble continuous and batch processes without being either of them. The application of fedbatch to denitrification is new. Fedbatch process has been primarily used in academia. Preliminary results show that fedbatch denitrification could be 1/3 as long as batch denitrification, 8 hours.

Hutcheson

CODE 2

11-5-79 Disclosure received - inventor notified.

12-79 Assigned to Hutcheson.

1-18-80 Prior art search underway.

2-11-80 Inventor to organize data for disclosure.

4-3-80 Note to file advising proceeding; Farone/Lowitz concur.

4-16-80 Memo to inventor requesting specific information on process.

5-80 Preliminary examples supplied by Mr. Bravo. Mr. Semp recommended waiting for formal report before preparing application.

6-9-80 PM 938 combined with 939.

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0000049424

940 FUME HOOD

R. Kelly/Q A Link

This fume hood comprises a unique ducting system which includes a base scavenging aperture which collects fume-fall vapors. Vapors of heavier than air solvents which exit the front ledge of a fume hood in a waterfall action and frontal spills which result in vapors are suctioned off at the floor level by a duct at the lower front of the hood. The lower duct is connected to the main system.

Sarofeen

11-14-79 Disclosure received - inventor notified.

12-79 Assigned to Sarofeen.

12-20-79 Search received from K&S--to inventor for review.

1-24-80 Request for recommendation of AIP for disposition.

4-15-80 Inventor checking with management on disposition.

6-27-80 Inventor checking with management on disposition.

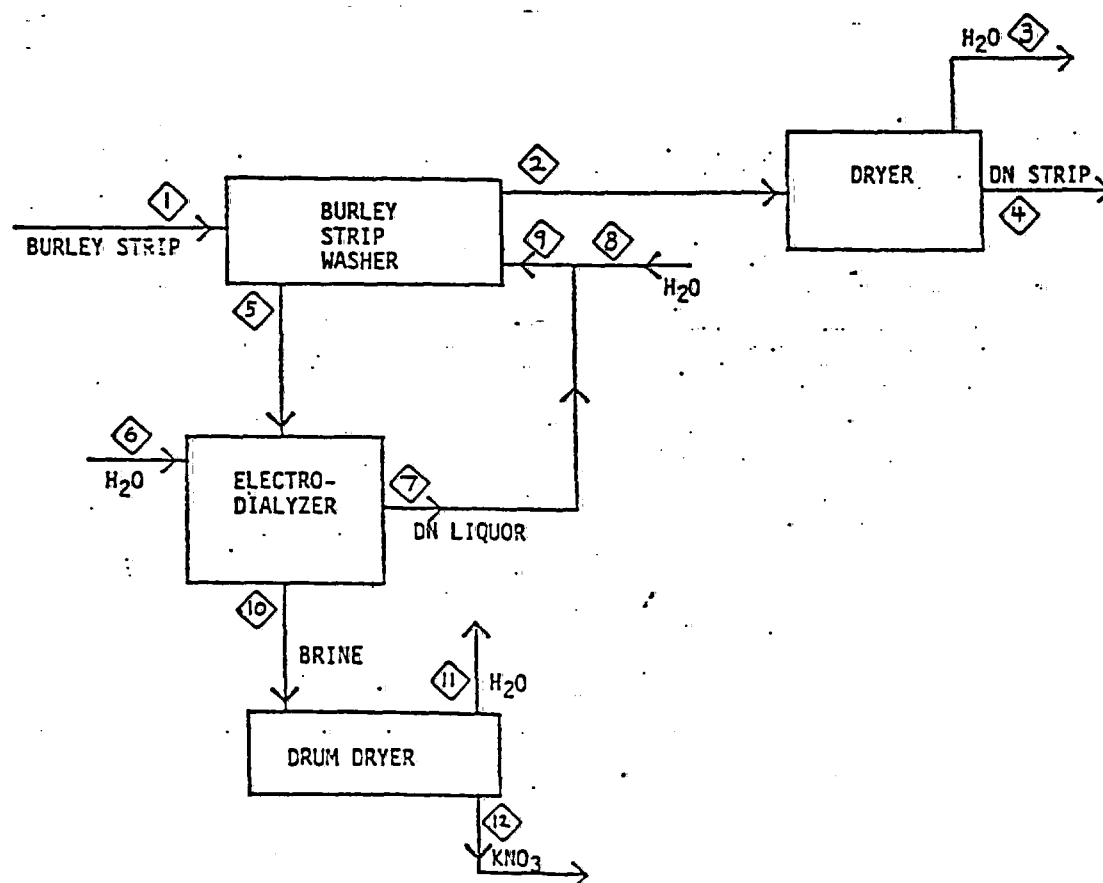
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0000049425

941 EXTRACTION AND DENITRATION OF BURLEY STRIP

S. Muller/R&D/Tobacco Materials/Burns/Gannon

Burley strip enters the washer at the end opposite the press section. The strip is sandwiched between two porous belts and immersed in the extraction medium. Upon exiting the washer, the belts and the strip are passed through a press section to remove excess liquor. Each of the washer's two porous belts has a tensioning device to compensate for changes in length during processing. The washer operates at a continuous wash rate of 200-300 pounds per hour.



Hutcheson

11-20-79 Disclosure received - inventor notified.

1-21-80 Assigned to Hutcheson; discussed with manager.

3-80 Close art found on apparatus aspects of the invention.

5-19-80 Memo to inventor and others requesting that they consider prior art and distinguish the apparatus previously disclosed.

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0000049426

942 COMPOUND TO ADD TO TOBACCO TO PRODUCE NICOTINE UPON SMOKING

W. Chan/R&D/Chemical Research/Sanders/Osdene

Related to 703.

Inskeep

11-21-79 Disclosure received - inventor notified.

12-79 Assigned to Inskeep.

1-2-80 Copy of disclosure sent to Depaoli re PM 703.

3-25-80 Latest information, examples will be forthcoming.

* * * * *

944 PREPARATION OF MIXED MALONATE ESTERS

E. Southwick/Chemical Research/Sanders/Osdene

Malonate esters useful as monomers for the preparation of flavor release agents.

Inskeep

12-12-79 Disclosure received--inventor notified.

1-21-80 Assigned to Inskeep.

3-25-80 Experimental work needed.

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0000049427

945 FLAVOR

S. Haut, R. Comes, M. Core/Chemical Research/Sanders/Osdene

Compound useful as a flavor additive much like WS-14.

Inskeep

INACTIVE 12-79 Disclosure received--inventors notified.
1-21-80 Assigned to Inskeep.
3-11-80 Certain prior art cited to inventor.
5-30-80 Inactive

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947 COOLING COMPOUND

F. DeBardleben/Chemical Research/Sanders/Osdene

Hutcheson

10-79 Disclosure made informally to S. Hutcheson
1-80 Disclosure logged in--inventor notified.
1-21-80 Assigned to Hutcheson; inventor working on synthesis of compounds.
3-17-80 Memo to inventor asking him to supply information to TPI for search.

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948 APPARATUS FOR PRESSURE DROP MEASUREMENT OF FIBROUS ARTICLES

W. Nichols/Cigarette Development/Gauvin/Meyer

Blish

1-25-80 Disclosure received--inventor notified.
2-19-80 Assigned to Blish.

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0000049428

951 TREATMENT OF PRINTED CIGARETTE TIPPING PAPER

R. Armstrong/Analytical Research/Bourlas/Lowitz/Farone

The invention consists of the treatment of printed cigarette tipping paper with ozone or excited atomic or molecular species of oxygen or nitrogen or combinations thereof which are formed by electrical discharge spark or corona around a charged wire in proximity to the paper. The result of this treatment is to change the surface of the printed paper so that its reception of adhesives is enhanced and thereby improve the performance of the tipping paper in high speed cigarette manufacture.

Blish

CODE 2

2-11-80 Disclosure received--inventor notified.

2-19-80 Assigned to Blish.

6-15-80 In-House prior art search conducted.

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952 PORTABLE PROGRAMER SYSTEM

W. Smick/Manufacturing Engineering/Grollimund/Kay/Pasquine

Divided out of 892.

Sarofeen

2-18-80 Disclosure received--Kay notified.

6-27-80 New disclosure being prepared by inventor.

* * * * *

953 IMPROVED METHOD FOR SELECTIVE DENITRATION VIA ELECTRODIALYSIS

G. Keritsis/Tobacco Materials/Burns/Gannon

Hutcheson/Gillis/WLKT

2-19-80 Disclosure received--inventor notified.

6-30-80 Preliminary disclosure.

7-1-80 Preliminary disclosure sent to T. Gillis for review.

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0000049429

956 SKIP GAP GUM MONITOR

J. Wheless and W. Shields/Manufacturing Engineering/Taylor/Kay/Pasquine

Use of a custom designed strobe light that is used to measure the correct timing between the tipping machine gum roller and cork knives. This light is triggered from a timing disc that is directly attached to the cork knife gear. Hence, when the light is directed at the tipping paper surface that has just had glue applied, it will give you a snapshot of the glue pattern. By referencing this snapshot to some fixed pointer, it will tell you whether or not the glue pattern is properly aligned for the knife cut. This can, of course, be done while the machine is operating at high speed and hence no production time is lost.

Sarofeen

3-28-80 Disclosure received--inventors notified.

6-27-80 Searched at USPTO; patent copies ordered.

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957 LOW COST ULTRALOW PRESSURE RELIEF VALVE

W. Sweeney/Manufacturing Engineering/Taylor/Kay/Pasquine

Blish

3-28-80 Disclosure received--inventor notified.

4-29-80 Outside search requested.

5-5-80 Inventor interviewed.

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0000049430

958 DYNAMIC CIRCUMFERENCE GAUGE

C. Irving/Tobacco Services/Osmalov/Gannon

The invention uses strain gauges mounted a spring, of suitable spring constant, to detect the diameter of cigarettes. The change of diameter of the cigarettes causes a change in the voltage output of the strain gauges when a cigarette is passed between the spring and a suitable guideblock. This device can be used to measure the diameter of cigarettes dynamically, that is while they are being produced.

Blish

4-3-80 Disclosure received--inventor notified

4-80 Assigned to Blish.

* * * * *

959 FLAVOR SYSTEM

J. Kang/Chemical Research/Sanders/Osdene

Inskeep

4-8-80 Disclosure received--inventor notified.

4-80 Assigned to Inskeep.

4-17-80 In-house search completed.

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960 FORMULATION OF A COLA-TYPE SOFT DRINK

A. Lendvay/S.D. Applications Laboratory/Will/Wakeham

Inskeep

4-8-80 Disclosure received--inventor notified.

4-80 Assigned to Inskeep.

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961 CIGARETTE PACKAGING

Manufacturing Engineering/Kay/Pasquine

Open-ended, semi-rigid outer sleeve for packaging cigarettes.

Palmer

4-16-80 Disclosure received from J. Kay--notified.

4-16-80 Search requested from outside firm.

5-9-80 Search completed

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0000049431

962 CARBONATED INSTANT SOFT DRINK

A. Lendvay/S.D. Applications Laboratory/Will/Wakeham

Inskeep

4-16-80 Disclosure received--inventor notified

5-7-80 Questions to inventor. See 10-11-80, 11-12-80, 12-13-80, 1-14-81, 1-15-81, 1-16-81, 1-17-81, 1-18-81, 1-19-81, 1-20-81, 1-21-81, 1-22-81, 1-23-81, 1-24-81, 1-25-81, 1-26-81, 1-27-81, 1-28-81, 1-29-81, 1-30-81, 1-31-81, 2-1-81, 2-2-81, 2-3-81, 2-4-81, 2-5-81, 2-6-81, 2-7-81, 2-8-81, 2-9-81, 2-10-81, 2-11-81, 2-12-81, 2-13-81, 2-14-81, 2-15-81, 2-16-81, 2-17-81, 2-18-81, 2-19-81, 2-20-81, 2-21-81, 2-22-81, 2-23-81, 2-24-81, 2-25-81, 2-26-81, 2-27-81, 2-28-81, 2-29-81, 2-30-81, 3-1-81, 3-2-81, 3-3-81, 3-4-81, 3-5-81, 3-6-81, 3-7-81, 3-8-81, 3-9-81, 3-10-81, 3-11-81, 3-12-81, 3-13-81, 3-14-81, 3-15-81, 3-16-81, 3-17-81, 3-18-81, 3-19-81, 3-20-81, 3-21-81, 3-22-81, 3-23-81, 3-24-81, 3-25-81, 3-26-81, 3-27-81, 3-28-81, 3-29-81, 3-30-81, 3-31-81, 4-1-81, 4-2-81, 4-3-81, 4-4-81, 4-5-81, 4-6-81, 4-7-81, 4-8-81, 4-9-81, 4-10-81, 4-11-81, 4-12-81, 4-13-81, 4-14-81, 4-15-81, 4-16-81, 4-17-81, 4-18-81, 4-19-81, 4-20-81, 4-21-81, 4-22-81, 4-23-81, 4-24-81, 4-25-81, 4-26-81, 4-27-81, 4-28-81, 4-29-81, 4-30-81, 5-1-81, 5-2-81, 5-3-81, 5-4-81, 5-5-81, 5-6-81, 5-7-81, 5-8-81, 5-9-81, 5-10-81, 5-11-81, 5-12-81, 5-13-81, 5-14-81, 5-15-81, 5-16-81, 5-17-81, 5-18-81, 5-19-81, 5-20-81, 5-21-81, 5-22-81, 5-23-81, 5-24-81, 5-25-81, 5-26-81, 5-27-81, 5-28-81, 5-29-81, 5-30-81, 5-31-81, 6-1-81, 6-2-81, 6-3-81, 6-4-81, 6-5-81, 6-6-81, 6-7-81, 6-8-81, 6-9-81, 6-10-81, 6-11-81, 6-12-81, 6-13-81, 6-14-81, 6-15-81, 6-16-81, 6-17-81, 6-18-81, 6-19-81, 6-20-81, 6-21-81, 6-22-81, 6-23-81, 6-24-81, 6-25-81, 6-26-81, 6-27-81, 6-28-81, 6-29-81, 6-30-81, 7-1-81, 7-2-81, 7-3-81, 7-4-81, 7-5-81, 7-6-81, 7-7-81, 7-8-81, 7-9-81, 7-10-81, 7-11-81, 7-12-81, 7-13-81, 7-14-81, 7-15-81, 7-16-81, 7-17-81, 7-18-81, 7-19-81, 7-20-81, 7-21-81, 7-22-81, 7-23-81, 7-24-81, 7-25-81, 7-26-81, 7-27-81, 7-28-81, 7-29-81, 7-30-81, 7-31-81, 8-1-81, 8-2-81, 8-3-81, 8-4-81, 8-5-81, 8-6-81, 8-7-81, 8-8-81, 8-9-81, 8-10-81, 8-11-81, 8-12-81, 8-13-81, 8-14-81, 8-15-81, 8-16-81, 8-17-81, 8-18-81, 8-19-81, 8-20-81, 8-21-81, 8-22-81, 8-23-81, 8-24-81, 8-25-81, 8-26-81, 8-27-81, 8-28-81, 8-29-81, 8-30-81, 8-31-81, 9-1-81, 9-2-81, 9-3-81, 9-4-81, 9-5-81, 9-6-81, 9-7-81, 9-8-81, 9-9-81, 9-10-81, 9-11-81, 9-12-81, 9-13-81, 9-14-81, 9-15-81, 9-16-81, 9-17-81, 9-18-81, 9-19-81, 9-20-81, 9-21-81, 9-22-81, 9-23-81, 9-24-81, 9-25-81, 9-26-81, 9-27-81, 9-28-81, 9-29-81, 9-30-81, 10-1-81, 10-2-81, 10-3-81, 10-4-81, 10-5-81, 10-6-81, 10-7-81, 10-8-81, 10-9-81, 10-10-81, 10-11-81, 10-12-81, 10-13-81, 10-14-81, 10-15-81, 10-16-81, 10-17-81, 10-18-81, 10-19-81, 10-20-81, 10-21-81, 10-22-81, 10-23-81, 10-24-81, 10-25-81, 10-26-81, 10-27-81, 10-28-81, 10-29-81, 10-30-81, 10-31-81, 11-1-81, 11-2-81, 11-3-81, 11-4-81, 11-5-81, 11-6-81, 11-7-81, 11-8-81, 11-9-81, 11-10-81, 11-11-81, 11-12-81, 11-13-81, 11-14-81, 11-15-81, 11-16-81, 11-17-81, 11-18-81, 11-19-81, 11-20-81, 11-21-81, 11-22-81, 11-23-81, 11-24-81, 11-25-81, 11-26-81, 11-27-81, 11-28-81, 11-29-81, 11-30-81, 12-1-81, 12-2-81, 12-3-81, 12-4-81, 12-5-81, 12-6-81, 12-7-81, 12-8-81, 12-9-81, 12-10-81, 12-11-81, 12-12-81, 12-13-81, 12-14-81, 12-15-81, 12-16-81, 12-17-81, 12-18-81, 12-19-81, 12-20-81, 12-21-81, 12-22-81, 12-23-81, 12-24-81, 12-25-81, 12-26-81, 12-27-81, 12-28-81, 12-29-81, 12-30-81, 12-31-81, 1-1-82, 1-2-82, 1-3-82, 1-4-82, 1-5-82, 1-6-82, 1-7-82, 1-8-82, 1-9-82, 1-10-82, 1-11-82, 1-12-82, 1-13-82, 1-14-82, 1-15-82, 1-16-82, 1-17-82, 1-18-82, 1-19-82, 1-20-82, 1-21-82, 1-22-82, 1-23-82, 1-24-82, 1-25-82, 1-26-82, 1-27-82, 1-28-82, 1-29-82, 1-30-82, 1-31-82, 2-1-82, 2-2-82, 2-3-82, 2-4-82, 2-5-82, 2-6-82, 2-7-82, 2-8-82, 2-9-82, 2-10-82, 2-11-82, 2-12-82, 2-13-82, 2-14-82, 2-15-82, 2-16-82, 2-17-82, 2-18-82, 2-19-82, 2-20-82, 2-21-82, 2-22-82, 2-23-82, 2-24-82, 2-25-82, 2-26-82, 2-27-82, 2-28-82, 2-29-82, 2-30-82, 3-1-82, 3-2-82, 3-3-82, 3-4-82, 3-5-82, 3-6-82, 3-7-82, 3-8-82, 3-9-82, 3-10-82, 3-11-82, 3-12-82, 3-13-82, 3-14-82, 3-15-82, 3-16-82, 3-17-82, 3-18-82, 3-19-82, 3-20-82, 3-21-82, 3-22-82, 3-23-82, 3-24-82, 3-25-82, 3-26-82, 3-27-82, 3-28-82, 3-29-82, 3-30-82, 3-31-82, 4-1-82, 4-2-82, 4-3-82, 4-4-82, 4-5-82, 4-6-82, 4-7-82, 4-8-82, 4-9-82,

6-20-80 Further disclosure received. [REDACTED]

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965 TOBACCO PECTIN FROM TOBACCO STALK MATERIAL

B. Semp and D. Teng/Bio-Materials/Farone/Lowitz/O'Donohue

Hutcheson

Tobacco pectin is isolated, particularly from stalk material using DAP and the like.

CODE 4

4-30-80 Disclosure received, inventors notified

4-10-80 Pertinent art sent to inventors with recommendation that we not
persue at this time.

* * * * *

000049432

966 DEVICE THAT PUNCTURES THROUGH TIPPING PAPER

S.Stone/New Products/Meyer/Gauvin

Blish

5-21-80 Disclosure received; inventor notified

6-3-80 Assigned to Blish

967 POWDERED DRINK FORMULATION

H. Wakeham/Science and Technology

Inskip

5-21-80 Disclosure received; inventor notified

6-27-80 Outside search requested.

968 THE REACTION OF FRUCTOSE SYRUP WITH AMINO ACID

L. Wu, J. Swain/Flavor Development/Meyer/Daylor

Related to PM 801 filed April 1979. -

Hutcheson

5-22-80 Disclosure received; inventors notified

6-30-80 Have discussed with inventor; plan to persue immediately.

969 DOUGHNUT SEALED FILTER

R. Hale and R. Ikeda/Flavor Development/Meyer/Daylor

Blish

5-29-80 Disclosure received; inventors notified

970 LOW DELIVERY CIGARETTE

L. Stewart/New Products/Meyer/Gauvin

Palmer/Not Assigned

5-29-80 Disclosure received; inventor notified

0000049433

RESEARCH REPORT ON THE EFFECTS OF THE

1980

1980

1. INTRODUCTION

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T. S. OSDENE

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